4.0
Land Use and Facilities

4.1 LAND USE

Fort Belvoir functions as an administrative and logistics center for the Military District of Washington. The general land use on Fort Belvoir is summarized in Table 4.1. This combined land area of 9,094 acres includes the 807 acre Engineering Proving Ground (EPG), 28 acre Revana Station and the 581 acre Humphreys Engineer Center (HEC) which is owned by the Army Corp of Engineers and supported by Fort Belvoir.

Table 4.1. General Land Use

Category	*Description*	*Approximate Size (acres)*
Improved acreage	Structures and adjacent areas such as roads, walkways, parking lots, and golf courses that require intensive maintenance	2,436
Semi-improved acreage	Areas that require periodic maintenance, primarily weed and brush control	241
Unimproved acreage	Natural areas requiring limited maintenance including wildlife refuges, forests, wetlands, wildlife corridors, shorelines, and hunting areas	6,417

Source: Fort Belvoir GIS information.

Land use throughout the installation is highly varied and consists of the following: administrative, research and development, medical, community facilities, housing (troop and family), service and storage, recreation, environmentally sensitive areas, and training areas. The *Fort Belvoir Real Property Master Plan, Long Range Component* divides the installation into six planning districts (Figure 4.1) (Woolpert, 1993a): South Post, Southwest Area, South Post Core Area, Lower North Post, Upper North Post and Davison Army Airfield.

The South Post Planning District is located on the Belvoir Peninsula and borders Accotink Bay, Dogue Creek, Gunston Cove, and the Potomac River. This planning area encompasses a portion of Fort Belvoir's historic district. Land uses within this area are primarily research and development, and educational facilities. The South Post Planning District contains several U.S. Army and DoD tenant organizations, including the Defense Mapping School, the U.S. Army Information Systems Software Command, the U.S. Army's DeWitt Hospital, and the Defense Systems Management College. In addition, the South Post Planning District contains research and development facilities, family housing, recreation, administration/education, supply/storage

and maintenance facilities, the eastern third of the Accotink Bay Wildlife Refuge (ABWR) and the South Post Golf Course. Adjacent to this district is the Southwest Area Planning District, which contains most of the training areas, most of the 1,360-acre ABWR, and a portion of Fort Belvoir's Forest and Wildlife Corridor. The Southwest Area Planning District borders Accotink Bay, Pohick Bay and Pohick Creek.

The South Post Core Area Planning District is a rectangular parcel of land within the South Post Planning District, bounded by a series of roads including (from 9th Street) Belvoir Road, Harris Road, 18th Street, Gaillard Road, 21st Street, Rossell Loop, Comstock Road, and Belvoir Drive to 23rd Street. The South Post Core Area Planning District has the highest density of buildings on Fort Belvoir and encompasses most of the Fort Belvoir historic district.

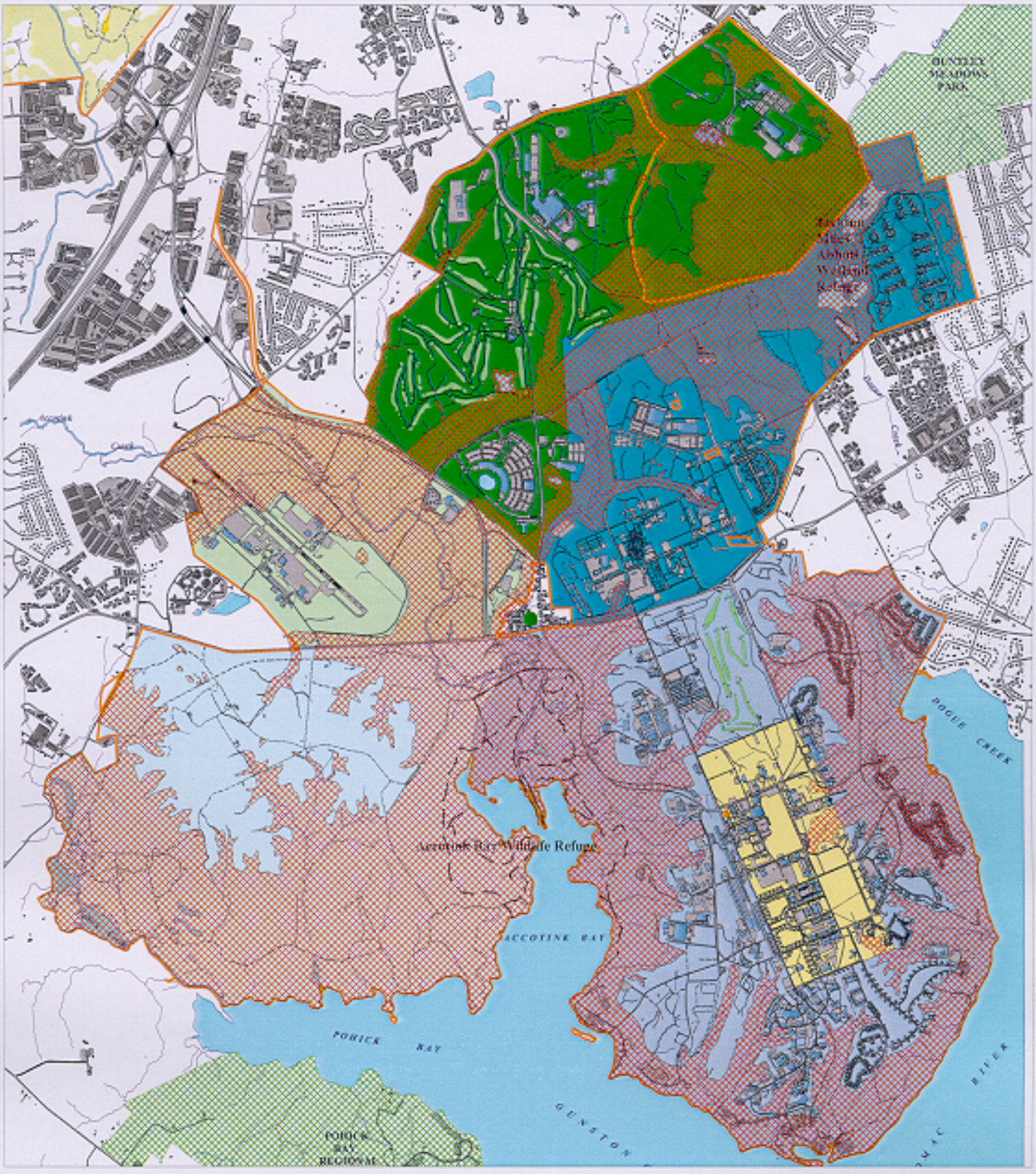
The Upper and Lower North Post Planning Districts accommodate troop and family housing, support facilities, and large tenant organizations such as the Defense Logistics Agency and the Defense Communication Electronics Evaluation and Testing Activity. These planning districts also encompass the North Post Golf Course, the Fort Belvoir Elementary School, the commissary, the post exchange, and recreation facilities for military personnel and their families. Each of these districts contains a portion of Fort Belvoir's Forest and Wildlife Corridor. The Lower North Post Planning District contains the 146-acre Jackson Miles Abbott Wetland Refuge (JMAWR).

The Davison Army Airfield Planning District contains the 388-acre airfield facility located on the western portion of the North Post (Landgraf, 2000a). Davison Army Airfield is a Class A Army airfield providing support facilities for both fixed- and rotary-wing aircraft (Section 4.2.4). This district contains a portion of Fort Belvoir's Forest and Wildlife Corridor.

EPG is not addressed as a separate planning district because it is controlled by the Assistant Secretary of the Army for Installations, Logistics and Environment. EPG consists of heavily wooded areas and training areas, which are rarely used. There are 44 structures at EPG, including 24 buildings and eleven explosives magazines (two of which are currently used) and barricades (Bland, 1999). Most of these structures are abandoned. Only two are occupied; several are used for storage.

4.1.1 Administration

Approximately 1,102 acres of the installation are used for administrative purposes (Landgraf, 2000a). Administration facilities include the post headquarters and post administrative offices, Defense Logistics Agency (DLA) Headquarters, and two major Army Command headquarters. Other administrative activities at Fort Belvoir include a printing plant, the Adjutant General's office, and an Adjutant General publications office and training facilities.


Environmentally Sensitive Area
Planning District
Upper North Post Area
Lower North Post Area
Davison Army Airfield Area
Southwest Area
South Post Core Area
South Post Area
N
DESIGNATED PLANNING DISTRICTS and ENVIRONMENTALLY SENSITIVE AREAS on FORT BELVOIR
SOURCE: WOOLPERT, 1995
FIGURE: 4.1
NOTE: PLANNING DISTRICTS and ENVIRONMENTALLY SENSITIVE AREAS ARE NOT MUTUALLY EXCLUSIVE

4.1.2 Research and Development

Research and development, a major function at Fort Belvoir, is conducted on 340 acres. The largest area designated as research is the 280-acre area in the Upper North Post that is currently occupied by the D/CEETA. The Communications and Electronics Command occupies 60 acres on the South Post. Research and development include administrative and laboratory facilities.

4.1.3 Medical

Medical facilities at Fort Belvoir occupy 103 acres (Landgraf, 2000a). The main medical facility is the DeWitt Hospital complex located in the center of the South Post. A dispensary and the Logan Dental Clinic are also located on the South Post. Three more dispensaries, two in the troop housing area and one at Davison Army Airfield, are also in operation.

4.1.4 Community Facilities

Community facilities for the use of military personnel and their families occupy 451 acres (Landgraf, 2000a). Most community facilities are located on the South Post, including convenience stores, a credit union, an automobile service station, an education center, and a library. Other facilities include a post office, banks, the Sosa Recreation Center, a movie theater, a self-help center, an officers' club, and a community club. Fort Belvoir also offers three child development centers, two on the North Post and one on the South Post. Fort Belvoir Elementary School, a Fairfax County school, is also located on North Post. Fort Belvoir has the largest commissary in the continental United States, located on the North Post. The installation recently constructed a 136,000-square-foot post exchange mall next to the commissary that offers a variety of shops and services, including a food court.

4.1.5 Housing

Family housing occupies 569 acres at Fort Belvoir. This housing includes the 2,070 enlisted and officer family units located primarily around the eastern edge of the South Post, and Lewis Heights and Woodlawn Village located on the eastern edge of the North Post. Fort Belvoir's troop housing occupies 72 acres (Landgraf, 2000a). Troop housing includes barracks for 1,200 single enlisted soldiers on the North Post off Gunston Road, and 530 temporary housing rooms for new arrivals and visitors (Senires-Dubyak, 2000).

4.1.6 Service and Storage

Service and storage facilities occupy 314 acres and are located throughout Fort Belvoir. These include activities and offices such as warehousing, motor pool facilities, and light-industrial areas. Fort Belvoir also has 129 acres of land dedicated to industrial uses (Landgraf, 2000a).

4.1.7 Recreation

Fort Belvoir has many recreation facilities, occupying about 1,006 acres, scattered throughout the installation in areas convenient to the population they serve (Landgraf, 2000a). Facilities available include a nine-hole golf course on the South Post and a 36-hole golf course on the Upper North Post, tennis courts, swimming pools, athletic fields, an archery center and ranges,

three picnic areas with grills, six soccer fields, and two football fields (Gibson, 1999). Fort Belvoir also has a youth services center where summer camps are held and the Sosa Community Center, which offers a variety of video games and pool tables. Fort Belvoir has an extensive system of paved and unpaved walking and running trails on the installation (Section 4.2.2).

The Dogue Creek Marina is located south of the Mount Vernon Road bridge. The marina has 105 wet slips and 300 dry-storage facilities, which are rented on an annual basis (King, 1999). The marina has a sewage pump-out station, electric and water hookups, a marine travel lift, and two boat launch ramps. It does not offer fueling facilities. The marina also rents boats. All marina facilities are open to active and retired military and family, and civilian personnel.

4.1.8 Environmentally Sensitive Areas

Fort Belvoir's Real Property Master Plan delineates 3,335 acres of environmentally sensitive areas (Woolpert, 1993a). The identification and delineation of environmentally sensitive areas was done to facilitate decision making in site selection for new facilities construction. The Real Property Master Plan defines environmentally sensitive areas as those areas where development would adversely affect the region surrounding that area, or where the engineering for development would incur excessive costs. Environmentally sensitive areas include wetlands, floodplains, and areas with steep topography, poor soils, endangered species habitat, and cultural resources (Woolpert, 1993a).

Much of the environmentally sensitive acreage is associated with the two wildlife refuges, and with the forest and wildlife corridor. The JMAWR is 146 acres and is located in the northeastern corner of the North Post. The ABWR is 1,360 acres located along Accotink Bay and Accotink Creek in the central portion of the South Post. Fort Belvoir also has 742 acres of designated forest and wildlife corridor that traverse the installation. This corridor connects the Huntley Meadows County Park just north of the installation to the JMAWR on the North Post. The corridor continues through the installation to the ABWR on the South Post and on to the Mason Neck State Park and the Potomac River National Wildlife Refuge Complex south of the installation (Figure 4.1).

In addition to the environmentally sensitive areas described above, the Fort Belvoir Real Property Master Plan considers Fairfax County designated Resource Protection Areas (RPAs), including floodplains, as environmentally sensitive (Woolpert, 1993b). Virginia's Chesapeake Bay Preservation Act defines RPAs as "components of the Chesapeake Bay Preservation Area comprised of sensitive lands at or near the shoreline that have an intrinsic water quality value due to the ecological and biological processes they perform and are sensitive to impacts which may result in significant degradation to the quality of state waters and loss of aquatic habitat." In general, RPAs consist of tidal wetlands, tidal shores, tributary streams, non-tidal wetlands connected by surface flow to a tidal wetland or tributary stream, a 100-foot buffer on the previous areas, and major floodplains.

On March 22, 1989, Fairfax County, in accordance with the Chesapeake Bay Preservation Act, adopted the Chesapeake Bay Preservation Ordinance that restricts development for areas mapped by the county as RPAs. Fairfax County has mapped RPAs on Fort Belvoir, and the installation has entered these areas into its GIS. On Main Post, these are located along Accotink Creek,

Kernon Run, Mason Run, Dogue Creek, Pohick Creek, Accotink Bay, Gunston Cove, the Potomac River, and several unnamed tributaries (Figure 4.2). On EPG, RPAs are mapped along Accotink Creek and Lark Branch, a tributary to Accotink Creek, near the eastern boundary (Figure 4.2).

As part of the National Flood Insurance Program, the Federal Emergency Management Agency (FEMA) has mapped flood hazard areas on Fort Belvoir (FEMA, 1990). The Flood Insurance Rate Maps identify the areas that would be inundated by a 100-year flood and show the areas that are determined to be outside the 500-year flood area. As of 2000, Fort Belvoir did not have electronic floodplain data included in its GIS. Fairfax County is in the process of updating its floodplain maps, which will include the Fort Belvoir area. Fort Belvoir will include the Fairfax County update in its GIS. Although floodplains are not mapped into the GIS, many are encompassed by the RPAs and are considered as severe constraints for planning and development purposes.

Floodplain and RPA management has primarily involved avoidance during development planning. Within this environmentally sensitive designation, 100-year floodplains are considered a moderate constraint and RPAs are considered a severe constraint. Moderately constrained areas are considered to be compatible only with lower intensity development, and must be thoroughly investigated before development. Severely constrained areas have the greatest degree of limitation, and are compatible only with very low-density or no development.

4.1.9 Airfield

The Davison Army Airfield encompasses 388 acres in the southwestern corner of the North Post (Section 4.2.4) (Landgraf, 2000a). The airfield is the primary transportation facility on Fort Belvoir. The 12th Aviation Battalion and Operational Support Airlift Agency use the airfield for rotary- and fixed-wing training.

4.1.10 Training Areas

In accordance with the U.S. Army Active/Inactive Range Inventory there is approximately 1,838 acres on Fort Belvoir, which are used solely for training (Figure 2.2). This acreage includes the explosive ordnance disposal area in Training Area 6 (Landgraf, 2000a). (Note: The Fort Belvoir Master Plan shows the training area acreage as 462 acres based on future plans to redistribute the area as administrative, research and development, etc.) A limited amount of land is available for military training maneuvers at Fort Belvoir, and many of the training areas are limited in use due to their proximity to on- and off-post housing and traffic.

Facility 7339 and Building 338, located at the tip of the southern peninsula at Whitestone Point along Gunston Cove, includes a boat launch ramp, pier, and harbor master facility/maintenance shop. This facility is used for training, docking, maintenance, and storage. The 299th Engineering Company uses the ramp (and beach areas in the Tompkins Basin Recreation Area) during float bridge training. The 464th Transportation Company secures their boats at the pier.

4.2 TRANSPORTATION SYSTEM

Fort Belvoir's transportation system consists primarily of roadways, multi-use and pedestrian trails, and an airfield. Each of these is discussed in detail below.

4.2.1 Roadways

Road access to Fort Belvoir is primarily through five named, gated entrances, as well as several unnamed gates. The Tulley Gate, Pence Gate, and Lieber Gate are on U.S. Route 1, and Walker Gate is on Old Mount Vernon Highway. Farrar Gate is on John J. Kingman Road off the Fairfax County Parkway. Unnamed gates are located off Woodlawn Road, Gunston Road, and at various entrances to training areas.

Fort Belvoir is serviced by many types of roadways including public highways, major and minor arterial roads, collector streets, local streets, and unpaved vehicle trails (Figure 2.2). Although several state-maintained highways traverse the installation, Fort Belvoir owns and maintains most of the roads that originate and terminate inside the installation boundaries. As of 2000, roadways within Fort Belvoir comprised approximately 115 miles of paved and 38 miles of unpaved roads (Landgraf, 2000c).

U.S. Route 1 is a state-maintained four-lane undivided artery that bisects Fort Belvoir, dividing it into North and South Posts. The Fairfax County Parkway is a four-lane, state-maintained, divided artery crossing north/south through a portion of Fort Belvoir and terminating at U.S. Route 1. Beulah Street and Woodlawn Road are also state-maintained, two-lane undivided roads crossing north/south through Fort Belvoir, ending at U.S. Route 1. Telegraph Road, a two-lane road currently being widened to a four-lane divided road, passes along the northern border of the installation. Old Colchester Road, a two-lane undivided road, passes along the southwestern boundary. Both of these are state-maintained roads.

Installation roads include paved two-lane roads throughout the developed sections of the north and south posts and unpaved vehicle trails in the training areas. Major bridges in the installation's road network include four public bridges and one restricted bridge. Of the four public bridges, two cross Accotink Creek, one crosses Dogue Creek, and one crosses U.S. Route 1 (on Gunston Road). A major bridge where Poe Road crosses Accotink Creek is not open to the public. Numerous smaller bridges and culverts cross tributaries throughout the installation. Fort Belvoir maintains these roads and bridges. The Virginia Department of Transportation maintains the bridges crossing Accotink Creek on Telegraph Road and U.S. Route 1.

4.2.2 Multi-use and Pedestrian Trails

Fort Belvoir contains 13.3 miles of multi-use trails designed to complement the various roads on the post (Landgraf, 2000b). Improved surface trails parallel many of the roads and developments on the post. These improved surface trails consist of a standard 6-foot-wide asphalt-paved surface. Other installation trails include the Fairfax County Parkway Trail, the John J. Kingman Road Trail, the Beulah Street–Woodlawn Road Trail, the Woodlawn Village Trail, and the Golf Course Jogging Trail (Woolpert, 1993a). Multi-use trails are designed to accommodate such activities as biking, jogging, and walking.

RIPARIAN/RESOURCE PROTECTION AREAS on FORT BELVOIR

SOURCE: THOMAS, 1998

FIGURE: 4.2

Fort Belvoir also contains 11.5 miles of pedestrian scenic nature and hiking trails on the post (Landgraf, 2000b). The Belvoir Ruins Trail is located in the vicinity of the Fairfax Mansion Ruins, and there are numerous trails through open spaces, such as the wildlife viewing trails through the ABWR (approximately 9 miles total) and the JMAWR (approximately 0.5 miles total). The Pohick Loop Trail (approximately 0.5 miles total), within the ABWR is accessible to persons with disabilities and has interpretive signs about the natural resources in the area (U.S. Army, 1999). In addition, a new trail providing access to Mulligan Pond that is accessible to persons with disabilities was completed in 1999 as part of a renovation project for the pond to enhance freshwater fishing opportunities on the installation.

4.2.3 Rail Facilities

There are no active rail facilities at Fort Belvoir. Railroad tracks formerly associated with the freight line spur of the Richmond, Fredericksburg, and Potomac Railroad have been abandoned. As of 1997, these tracks consisted of the spur line running along the Fairfax County Parkway and Gunston Road to the bridge crossing U.S. Route 1. The railroad track south of that bridge was removed in 1996. The railroad track north of U.S. Route 1 to John J. Kingman Highway has also been removed. North of John J. Kingman Highway, the railroad track will remain in an unmaintained state. The Washington Area Metropolitan Transit Authority (WMATA), in its 25-year *Transit Service Expansion Plan* (WMATA, 1999), has identified various proposals for the expansion of heavy rail, including an extension south to the Fort Belvoir / Lorton area. Thorough studies must be performed prior to any further consideration of this extension. As of 2000, no such studies have either been endorsed or initiated (Donodeo, 2000).

4.2.4 Air

The Davison Army Airfield is located along U.S. Route 1 on the North Post of Fort Belvoir. It is a Class A Army airfield equipped with an adjacent heliport that accommodates fixed- and rotary-wing aircraft. The airfield has 4,700 linear feet of painted runway, with extensions for overruns on either end bringing the total length to 5,630 feet. The runway is 81 feet wide, made of asphalt, and is located parallel to a 4,900-foot extended taxiway. A smaller concrete runway that is 450 feet long and 40 feet wide is used for the helipad.

The mission of the Davison Army Airfield is to transport passengers and freight for the Army and the Department of Defense. This facility is also used for training. The airfield contains five repair shops, maintenance aprons, storage areas for fuel and other flammable materials, and fuel dispensing facilities. Aircraft are restricted to a minimum vectoring altitude of 2,000 feet over the ABWR.

4.3 UTILITIES

Utilities on Fort Belvoir consist primarily of a county potable water supply and distribution system, groundwater wells, a sanitary sewer system, a storm sewer system, an electric power system, a natural gas system, a steam system, and a communications infrastructure.

4.3.1 Water Supply

The Fairfax County Water Authority supplies potable water to Fort Belvoir. The on-post water distribution system is owned, operated, and maintained by Fort Belvoir. The operation, inspection, and maintenance of the water system includes all system appurtenances, including pipes, pump stations, and holding tanks. As of 2001, there were approximately 78 miles of water main (greater than 6-inch) pipe on Fort Belvoir. The ancillary structures that complement the water supply system include three pumping stations, four elevated storage tanks, one ground-level storage tank, and a chlorination unit. One of the four elevated storage tanks is dedicated for use by the North Post Golf Course. The four elevated tanks and one ground storage tank provide approximately 2.6 million gallons of storage. A total of 2.2 million gallons per day (MGD) are provided through two major points of entry, two Fairfax County Water Authority meter vaults/pump stations on Pole Road and Telegraph Road. There are no potable water supply facilities in the training areas.

Fort Belvoir has a number of active and inactive groundwater supply wells. None of the wells supply potable water. They are used for irrigation. Three wells at the North Post Golf Course and one at the DLA headquarters building are used to provide irrigation water. A single well at the MDW horse stables in Training Area 8 is used to provide water for the horses. In 1999, 17.8 million gallons were drawn from the three golf course wells, with a peak daily withdrawal of 0.10 million gallons from Well # 1 in June (U.S. Army, 2000i).

In 1997, Fort Belvoir located and mapped existing groundwater supply and monitoring wells throughout the installation. Approximately 220 wells were identified. A majority of these were groundwater-monitoring wells. More than 20 of these wells were to be closed and removed from service. Two deep wells (greater than 300 feet) were closed in 2000.

4.3.2 Sanitary Sewer System

Fort Belvoir owns and maintains all sanitary sewer system appurtenances, including pipes, pump stations, and collection structures. As of 2000, Fort Belvoir discharged about 7.8 MGD to the sanitary sewer system that ultimately discharges to Fairfax County's Norman M. Cole, Jr., Pollution Control Plant, formerly known as the Lower Potomac Pollution Control Plant. The system on post includes 37 sewage pumping/lift stations and two main pumping stations. A 6,300-gallon septic tank is also located on post at the Golf Course Maintenance Facility on Telegraph Road. The tank does not have an associated septic field.

4.3.3 Storm Sewer System

Fort Belvoir's stormwater sewer system consists largely of open channels that receive overland sheet flow and point source flows originating from within the installation's 58 subwatersheds. Fort Belvoir's storm sewer system consists of approximately 118,360 linear feet of paved drainage ditch and 315,800 linear feet of storm drain. Catch basins within the system have a 2.5- to 3.0-foot drop from the pipe invert to the bottom of the basin. All stormwater is ultimately discharged into the post's watercourses. Additional stormwater management structures include detention ponds and oil/water separators at the motor pools and at the airfield. Fort Belvoir owns and maintains all storm sewer system appurtenances, including pipes, concrete channels, manholes, and detention basins.

4.3.4 Electric Power System

The Dominion Virginia Power Company provides electrical service to Fort Belvoir from a substation near the HEC. Fort Belvoir owns and maintains all system appurtenances, including electrical lines, substations, transformers, and grounding points. Power is transferred to a Fort Belvoir-owned switching station and distributed to the post at 34.5 kilovolts. Electrical power is transmitted via approximately 78 linear miles of overhead and 83 miles of underground electrical distribution lines. As of 2000, several overhead feeders were used to serve the various areas of the post, including some feeders that are interconnected to form looped feeder areas. A total of 10 substations on the post are located in various areas to transform power to lower voltages. Fort Belvoir also uses one combination substation and switching station and three switching stations. Auxiliary generators are used as backup for various critical functions on Fort Belvoir (Landgraf, 2000c).

4.3.5 Natural Gas System

The natural gas system on Fort Belvoir is owned and operated by Washington Gas. This includes the operation and maintenance of all system appurtenances, including pipes, valves, and header distribution fixtures. Fort Belvoir has been upgrading its natural gas supply system since 1993. These upgrades include the conversion of facilities from Number 2 and Number 6 fuel oil to natural gas, replacement of old piping, and the placement of new main lines and meters. As of 2000, natural gas was distributed throughout the post by more than 25 linear miles of main gas lines and 11 miles of service lines that primarily service the family housing areas. The upgrade of existing pipe and conversion of additional facilities to natural gas will continue over the next few years. All new construction on Fort Belvoir will be hooked into the natural gas system (Landgraf, 2000c).

4.3.6 Steam System

The DeWitt Army Community Hospital, Davison Army Airfield, and the larger buildings on Fort Belvoir use steam to provide heat and hot water. Newly constructed facilities such as the DLA, and smaller buildings such as residential buildings, use individual boilers to supply heat and hot water. Fort Belvoir has four high-pressure steam plants and six low-pressure plants. Fort Belvoir owns and maintains all system appurtenances, including boilers, pipes, and distribution fixtures. As of 1997, there were approximately 13 linear miles of steam and condensate distribution lines (supply and return) throughout Fort Belvoir. The majority of the distribution piping associated with each central boiler plant operation is underground. In 1999, Fort Belvoir completed the replacement of all steam traps on the post.

4.3.7 Communications

The telecommunications and information services consist of a copper and fiber-optic data-distribution network. The telephone switch is ISDN (Integrated Services Digital Network)-capable, and the network backbone is ATM (Asynchronous Transfer Mode). Most of the distribution cable is carried through an underground ductbank. Fort Belvoir owns all system appurtenances, including copper and fiber-optic cables, utility poles, and computerized

switchboard systems that are associated with inter-base and DoD applications. As of 1997, the main telephone switch handled 18,000 telephone lines. This switch could be upgraded to handle up to 45,000 lines.

4.4 PROJECTED CHANGES IN FACILITIES

Projected changes in Fort Belvoir facilities include the construction of major new buildings and recreational areas, and expansions and renovations of existing facilities (Table 4.2). On-post housing will experience construction and renovation. Transportation systems and utilities will be expanded or enhanced as needed to support new construction. Utilities will be privatized in the near future. No change in training areas is anticipated. In addition, it is expected that regional infrastructure systems (e.g., roads, sewer and utility lines) that are located through Fort Belvoir will be constructed or renovated in the near term. These regional systems also support off-post development.

4.4.1 Major New Building Construction

Thirty-one major building projects are scheduled at Fort Belvoir for fiscal years (FY) 01 through 05. These projects include 14 carried forward from FY 97 through FY 00 and are shown in Table 4.2.

Table 4.2. Construction Projects for FY 97 through FY 05

Fiscal Year	*Project Description*	*Progress Notes**
97	Renovate Barracks: 2110/09/11	Under construction
97	Replace Underground Electrical: Woodlawn	On hold
97	Tompkins Basin Recreation Area	In design
98	Dogue Creek Village, Ph2	Under construction
99	Utility Modernization (BLDG 1422)	ESPC funding
99	Renovate Barracks: 2102/03/04	Under construction
99	Army Reserve Center	Under construction
99	NGIC Charlottesville	Under construction
00	Military Police Station	Under construction
00	Davison Airfield Fire Station	100 % designed
00	Bowling Center Addition/Upgrade	—
00	Utility Modernization	—
00	Golf Course Maintenance Facilities	Under construction
00	South 9 Golf Course Club House	Under construction
01	Dogue Creek Village, Ph3	In design
01	NP Golf Club House Addition/Modern	On hold
01	D/CEETA S-Block Building	In design
01	DTRA Building	In design
01	Expand/renovate Main PX	In design
02	Post Chapel	—
02	Replacement of Family Housing: T400 Area	Program on hold
02	School-Age Youth Recreation Facility	—
03	Replace Main Post Library	—
03	Replace South Post Gymnasium	—

Table 4.2. Construction Projects for FY 97 through FY 05		
03	Multipurpose Athletic Fields	—
(continued)		
03	Renovate Quarters: Rossell Loop	—
04	Indoor Pool Add/Modernization	—
04	Hospital Replacement	—
04	Renovate Jadwin: Qtrs. 451-455	Program on hold
05	Community Activity Center, N.P.	—
05	Renovate Quarters: Colyer Village	Program on hold

Source: Groeneveld, 2000.

*No information was available on the progress of those projects marked by a "—" .

4.4.2 Housing

The U.S. Army has proposed to privatize all of its housing by the year 2005. Fort Belvoir continues to be considered. If this occurs, Fort Belvoir will no longer be responsible for maintenance of the privatized housing areas, except the historic homes. As of 2000, Fort Belvoir owned and operated its housing facilities. Proposed new construction and renovations to these facilities include:

- A three-phase project to renovate Dogue Creek Village, which will house junior enlisted personnel. The village is located east of Mount Vernon Road, north of Jadwin Loop, along the western shore of Dogue Creek near its mouth. The second phase of this project, which will renovate a 49-unit complex, is still under way. The third phase, which will consist of an additional 148 renovated units, is scheduled for the year 2001.

- Temporary housing units (T400) built in 1921 are under study for rehabilitation or replacement. These housing units are located on Jadwin Loop, Snow Loop, Harrington Drive, and 21st Street.

- Rossell Housing, which houses field-grade officers, will be revitalized or replaced. This housing area is located on Rossell Loop. This project is scheduled for the year 2002.

- New housing units are planned for Fort Belvoir. These include 380 family housing units and 300 single soldier barracks.

4.4.3 Recreation

Facilities supporting recreation activities, as well as outdoor education, are proposed for the Tompkins Basin area of the installation. Currently, design plans are being developed for the future use of this site. The Tompkins Basin Recreation Area will include only land-based recreation facilities (e.g., cabins, RV campsites, tent campsites, hotel/conference center, swimming pool, ball fields, nature trails). Previous plans included a marina with boat launch facilities. These water-based recreation components have been removed from the project. The existing Dogue Creek Marina will undergo major renovation and upgrade.

4.4.4 Training

Facility 7339 and building 338, located at the southern tip of Fort Belvoir, is being upgraded to include a permanent pier extension, boat ramp, harbor master facility/maintenance shop, and storage facilities to further accommodate the 464th Transportation Company. A motor pool and Reserve Center are being constructed on North Post.

4.4.5 Transportation

Fort Belvoir has several major transportation initiatives in progress. These include the North Post Roads Study, which is being undertaken to address security concerns. The study will evaluate road closures, entry point controls, road realignments, and new roads.

The Comprehensive Plan for Fairfax County, Virginia (Fairfax County, 1995a) indicates that the Virginia Department of Transportation plans to widen or relocate several roads crossing or bordering Fort Belvoir as follows:

- U.S. Route 1 will be widened to six lanes through Fort Belvoir.
- Telegraph Road is being widened to four lanes along the entire northern border of Fort Belvoir.
- Woodlawn Road may be closed between U.S. Route 1 and John J. Kingman Road, based upon the outcome of the North Post Road Study.
- John J. Kingman Road may be widened to four lanes from the Fairfax County Parkway to Mulligan Road, based upon the outcome of the North Post Road Study.
- Mulligan Road may be widened to two lanes from Telegraph Road to Pole Road, based upon the outcome of the North Post Road Study.
- The final segment of the Fairfax County Parkway will be constructed and will pass through the EPG. The final segment will be four lanes and will require a new bridge to cross Accotink Creek.

As an alternative mode of transportation, Fort Belvoir will extend the Fairfax County's portion of the Potomac Heritage National Scenic Trail through the installation from the U.S. Route 1 Old Mount Vernon Highway area to Old Colchester Road. This extension will connect with the regional Potomac Heritage National Scenic Trail system.

4.4.6 Utilities

Fort Belvoir's sanitary sewer, water, and electric systems will be fully privatized in the near term (Carroll, 1999). A seven-phase upgrade of the electric power system was initiated in 1988 which, when completed, will eliminate most of the existing substations and add new substations only where needed. The future of the seven-phase upgrade plan is dependent on the privatization agreement.

The upgrade of existing pipe and conversion of facilities to natural gas will continue over the next few years. All new construction on Fort Belvoir will be connected to the natural gas system.

Fort Belvoir has completed the two-phase process of converting all large central plants on-post (Buildings 1422 and 332) from Number 6 fuel oil-fired boilers to natural gas-fired boilers with Number 2 fuel oil backup. Central plant 332 was converted to burn natural gas in 1996. The three Number 6 fuel oil-fired central plant 1422 boilers were replaced with three new natural gas-fired boilers in December 2000 (Owens, 2000).